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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,324	10/15/2004	Rigobert Leon Maria Bosman	120668	9222
25944	7590	09/10/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER KHAN, AMINA S	
			ART UNIT 1751	PAPER NUMBER
			MAIL DATE 09/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,324

Applicant(s)

BOSMAN ET AL.

Examiner

Amina Khan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 9, 2007 has been entered.
2. Claims 1-16 are pending. Claim 1 has been amended.
3. The rejection of claims 1-4 and 9-11 under 35 U.S.C. 103(a) as being unpatentable over Marshall (US 4,800,117) in view of Makino et al. (JP 410140479) is withdrawn.
4. The rejection of claims 5-9 and 12-16 under 35 U.S.C. 103(a) as being unpatentable over Marshall (US 4,800,117) in view of Makino et al. (JP 410140479) and further in view of Droste et al. (GB 2,040,327) is withdrawn.

5. The rejection of claims 5-8 and 12-16 under 35 U.S.C. 103(a) as being unpatentable over Marshall (US 4,800,117) in view of Makino et al. (JP 410140479) and further in view of Van Leeuwen et al. (US 4,473,617) is withdrawn.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 3 recites the limitation "followed by a thermofixing step" in line 3. There is insufficient antecedent basis for this limitation in the claim because claim 1 recites "consisting of" language, which does not permit the inclusion of additional steps. Appropriate correction of the claim language is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1,2 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by Sasamoto et al. (JP 01306647).

Sasamoto et al. teach pile cloth in which a spun dyed polyester and a non spun dyed polyester are intermixed to form the pile portion and then dyed with a disperse dye

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(claim 1). Sasamoto et al. further teach weaving the polyesters together and that the polyester has ethylene terephthalate (page 4 and 5). Sasamoto et al. further teach the spun dyed yarns are orange, red, blue and green (page 5).

Accordingly, Sasamoto et al. anticipate the material limitations of the instant claims.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasamoto et al. (JP 01306647) as applied to the claims above, and further in view of (Langstaff et al. (US 3,414,957).

Sasamoto et al. are relied upon as set forth above. Sasamoto et al. clearly teach drying the pile cloth in the usual manner after dyeing (page 8, application example).

Sasamoto et al. do not teach thermofixing.

Langstaff et al. teach methods of dyeing polyethylene terephthalate followed by drying at 190°F, which meets the claimed limitation of thermofixing. While example II used Basacryl dyes, Langstaff et al. teaches the equivalence of disperse dyes with the Basacryl dyes (column 4, lines 25-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the heated drying methods of Langstaff et al. into the dyeing methods of Sasamoto et al. because Langstaff et al. teach these steps as useful conventional drying methods for drying dyed PET. Sasamoto et al. clearly invite the inclusion of steps for drying the pile cloth in the usual manner after dyeing (page 8, application example). One of ordinary skill in the art would have been motivated to

substitute one known method of drying dyed polyester for another known method for the predictable result of fixing the dye.

11. Claims 4-8 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasamoto et al. (JP 01306647), as applied to the claims above, and further in view of Van Leeuwen et al. (US 4,473,617).

Sasamoto et al. are relied upon as set forth above. Sasamoto et al. clearly teach using the polyester based pile cloth for car seats and the interior trim of automobiles (page 3).

Sasamoto et al. are silent as to the instantly claimed breaking tenacities, hot-air shrinkages, elongation at break, yarn linear densities and filament linear densities of the polyester fibers. Sasamoto et al. do not teach the seat belt utility for the fabrics.

Van Leeuwen et al. teach seat belt webbing which comprise polyethylene terephthalate of tensile strength 50-150 cN/tex, breaking elongation of 7-25%, overall denier from 300-5000 dtex, and individual deniers from 30-600 dtex (column 3, lines 61-68; column 4, lines 1-5). Van Leeuwen et al. specifically teach polyethylene terephthalate with dtex of 947 or 952, breaking tenacity of 77.3 or 69.0, elongation at ruptures of 14.2 or 14.1%, hot air shrinkage (4 min-160°C) of 7.0 or 5.7 (column 7, table II, examples 2 and 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Sasamoto et al. by utilizing the polyethylene terephthalate fibers taught by Van Leeuwen et al. because Van Leeuwen

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et al. teach these fibers produce seat belts that will not wear excessively under high load. One of ordinary skill would have further been motivated to use the pile fabrics of Sasamoto to make seat belts because Van Leeuwen clearly teaches similar materials as useful in the production of seat belts and Sasamoto et al. clearly teach using the cloth for car seats and the interior trim of automobiles. One of ordinary skill in the art would have been motivated to combine the teachings of the references absent unexpected results.

Van Leeuwen et al. has hot air shrinkage values of polyethylene terephthalate measured at 160°C for 4 min. These values are slightly below those instantly claimed, however at increased time and temperatures the % of hot-air shrinkage would increase. Furthermore, the values of Van Leeuwen are not limiting since they are simply cited in an example. One of ordinary skill would have been motivated to optimize to the instantly claimed hot-air shrinkage absent unexpected results.

12. Claims 4-8 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasamoto et al. (JP 01306647), as applied to the claims above, and further in view of Droste et al. (GB 2,040,327).

Sasamoto et al. are relied upon as set forth above. Sasamoto et al. clearly teach using the polyester based pile cloth for car seats and the interior trim of automobiles (page 3).

Sasamoto et al. are silent as to the instantly claimed breaking tenacities, hot-air shrinkages, elongation at break, yarn linear densities and filament linear densities of the polyester fibers. Sasamoto et al. do not teach the seat belt utility for the fabrics.

Droste et al. teach spun-dyed yarns for use in seat belt webbing which comprise polyethylene terephthalate of tensile strength 50-90 cN/tex, preferably 60-80 cN/tex, hot air shrinkage (after 15 minutes at 190°C) of from 8-22%, preferably from 10-20%, uniform breaking elongation of 10-15%, preferably from 12-14%, overall denier from 100-3000 dtex, preferably from 550-1670 dtex, and individual deniers from 5-20 dtex, preferably 8-15 dtex (page 2, lines 20-30). Droste et al. further teach dyeing spun-dyed yarns bright colors (page 2, lines 20-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Sasamoto et al. by utilizing the polyethylene terephthalate fibers taught by Droste et al. because Droste et al. teach these fibers produce seat belts with high tensile strength which is required in the industry. One of ordinary skill would have further been motivated to use the pile fabrics of Sasamoto to make seat belts because Droste clearly teaches similar materials as useful in the production of seat belts and Sasamoto et al. clearly teach using the cloth for car seats and the interior trim of automobiles. One of ordinary skill in the art would have been motivated to combine the teachings of the references absent unexpected results.

Conclusion

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AK

AK
September 5, 2007

Lorna M. Douyon

LORNA M. DOUYON
PRIMARY EXAMINER